


## 18. Ethics

CSE 498, Collaborative Design

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## S Ethics vs Law

- Ethics
  - “Good” vs “Evil” or “Right” vs “Wrong”
  - Moral Judgment
  - Choice
- Law
  - Legal vs Illegal
  - Legal Judgment
  - No Choice

## S Professional Ethics

- Set by...
  - Professional Society
  - Licensing Agency
  - Government
  - Company
  - Etc...
- Must obey if you want to...
  - ...be a member
  - ...be licensed
  - ...do business
  - ...etc
- More Like Law

## S Resources

- University of Virginia  
<http://repo-nt.tcc.virginia.edu/ethics/index.htm>
- Texas Tech  
<http://www.nieee.org/pd.cfm?pt=NIEE>
- ACM  
<http://www.acm.org/constitution/code.html>
- IEEE  
<http://www.iee.org>

## S ACM (1 of 5)

- Code of Ethics and Professional Conduct
- <http://www.acm.org/constitution/code.html>

1. General Moral Imperatives
2. More Specific Professional Responsibilities
3. Organizational Leadership Imperatives
4. Compliance with the Code

## S ACM (2 of 5)

1. General Moral Imperatives
  1. Contribute to society and human well-being.
  2. Avoid harm to others.
  3. Be honest and trustworthy.
  4. Be fair and take action not to discriminate.
  5. Honor property rights including copyrights and patent.
  6. Give proper credit for intellectual property.
  7. Respect the privacy of others.
  8. Honor confidentiality.



## ACM (3 of 5)

### 2. More Specific Professional Responsibilities

1. Strive to achieve the highest quality, effectiveness and dignity in both the process and products of professional work.
2. Acquire and maintain professional competence.
3. Know and respect existing laws pertaining to professional work.
4. Accept and provide appropriate professional review.
5. Give comprehensive and thorough evaluations of computer systems and their impacts, including analysis of possible risks.
6. Honor contracts, agreements, and assigned responsibilities.
7. Improve public understanding of computing and its consequences.
8. Access computing and communication resources only when authorized to do so.

7



## ACM (4 of 5)

### 3. Organizational Leadership Imperatives

1. Articulate social responsibilities of members of an organizational unit and encourage full acceptance of those responsibilities.
2. Manage personnel and resources to design and build information systems that enhance the quality of working life.
3. Acknowledge and support proper and authorized uses of an organization's computing and communication resources.
4. Ensure that users and those who will be affected by a system have their needs clearly articulated during the assessment and design of requirements; later the system must be validated to meet requirements.
5. Articulate and support policies that protect the dignity of users and others affected by a computing system.
6. Create opportunities for members of the organization to learn the principles and limitations of computer systems.

8



## ACM (5 of 5)

### 4. Compliance With The Code

1. Uphold and promote the principles of this Code.
2. Treat violations of this code as inconsistent with membership in the ACM.

9



## Patent vs Copyright

- Patent
    - Own "Idea"
    - Via Patent Process
    - "Easier" to Protect
  - Copyright
    - Own "Text"
    - Via
      - "© 2005 by Wayne R. Dyksen. All Rights Reserved."
      - and/or
      - By Registering
    - "Harder" to Protect
- Check with an IP attorney!

10



## Ethical Issues

- Is it ethical to monitor email?  
Is it legal to monitor email?
  - University
  - Employer
  - Government
- Is it ethical to monitor Internet traffic?  
Is it legal to monitor Internet traffic?
  - University
  - Employer
  - Government

11



## Issues

- Cookies
  - Are cookies ethical? Legal?
  - Should there be cookie legislation?
  - Could you enforce cookie legislation?
- Spy-Ware
  - Is spy-ware ethical? Legal?
  - Should there be spy-ware legislation?
  - Could you enforce spy-ware legislation?

12

## S Ethical Issues

- If a novice user does not restrict access, is it ethical to browse or take their files? Legal?
- If an **expert** user does not restrict access, is it ethical to browse or take their files? Legal?

13

## S Ethical Issues

- You miss a meeting for your capstone team. You were at Midnight Madness, but you tell your teammates that you were sick. Is this ethical? Legal?
- Your testifying in a court of law under oath and you say that you missed your capstone meeting because you were sick when you were really at Midnight Madness. Is this ethical? Legal?

14

## S Ethical Issues

Suppose you work at a company that stores sensitive data (medical records, social service records, etc.). You have access to data, and download them to your notebook computer, and bring it home to finish a report. You also back up a copy of the data to your home computer in order to work at home. Is this ethical? Legal?

15

## S Ethical Issues

Suppose you visit certain countries where there are vendors with large displays of cheap software, music, and DVDs. Is it ethical to buy them? Legal?

16

## S Ethical Issues

You work as a software engineer on an airplane. The project is late and the software does not work to specifications. It may be safety critical, but your boss says it's of no concern. And, after all, the project is late and over budget. What should you do? What would you do?

17

## S Ethical Issues

You are a consultant to develop a database for a company. An inexpensive implementation does not provide security for sensitive personal data of the client's customers. The more expensive implementation provides security, but the company says they want a cheap albeit non-secure solution. Is this ethical? Legal?

18

## S Ethical Issues

You are a consultant, asked to evaluate designs and recommend a solution for a company. You conclude that one particular company has the best solution. However, you do not mention that you have a significant financial interest in the company. Is this ethical? Legal?

19

## S Ethical Issues

Four CSE seniors enroll in the capstone design course. A client has ideas for a software product. The students implement the ideas with a few ideas of their own. After graduating, the students form a company, produce and sell the same software. Is this ethical? Legal?

20